
A New Species of *Hemilophia* (Brassicaceae) from China

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ABSTRACT. *Hemilophia sessilifolia* is described and illustrated. Its relationship to the other species of *Hemilophia* is discussed.

The genus *Hemilophia* Franchet consists of three species, *H. pulchella* Franchet, *H. rockii* O. E. Schulz, and the new species *H. sessilifolia* Al-Shehbaz, Arai & H. Ohba, all endemic to southwestern Sichuan and adjacent Yunnan, China.

Hemilophia is readily distinguished from the related Chinese *Dipoma* Franchet by the appendaged and strongly inflated bases of the median staminal filaments, slender replum, entire leaves, and straight fruiting pedicels, and by lacking the fruit septum. *Dipoma* has slender filaments, strongly flattened replum, apically dentate leaves, strongly curved and loop-forming fruiting pedicels, and complete septum. *Hemilophia* is separated from the Himalayan and central Asian *Dilophia* Thomson by having slender rhizomes, appendaged and strongly inflated bases of the median staminal filaments, slender replum, and large (2–3 mm) seeds, 1 or 2 per fruit. *Dilophia* is a non-rhizomatous perennial with slender filaments, broadly winged replum, and small (ca. 1 mm) seeds, several per fruit.

The new species, *Hemilophia sessilifolia*, which is known only from the type collection, was collected during a recent Sino-Japanese expedition to Dauxue Shan, Yunnan.

Species ab *H. pulchella* Franchet et *H. rockii* O. E. Schulz foliis caulinis sessilibus, sepalis membranaceis integris facile cadentibus, petalis persistentibus, stylo glabro, et trichomatibus simplicibus oblecta bene differt.

Herbs perennial, rhizomatous. Rhizomes slender, not scaly. Stems 1 to several from basal rosette or solitary from rhizomes, 3–9 cm tall, simple or few-branched, with spreading to appressed simple trichomes 0.06–0.25 mm long. Basal leaves oblanceolate, 6–10 × 1.5–2.5 mm, dry at anthesis, densely beset with straight simple trichomes 0.8–1.3 mm long. Cauline leaves oblong to oblong-ob lanceolate, 2.5–5(–8) × 1–2(–2.5) mm, sessile, entire, obtuse at apex, glabrous or minutely hairy as on stem. Inflorescences corymbose racemes, not elongated in fruit, bracteate throughout; bracts similar to cauline leaves. Sepals obovate, membranous, early caducous and leaving 4 receptacular teeth, not saccate, 1.8–2.7 × 1.2–1.5 mm, entire, rounded at apex. Petals persistent to fruit maturity, broadly obovate, 2-lobed, abruptly narrowed to claw, 6–7 × 4–5.5 mm, creamy white with dark green veins, pale to light brown at mouth, apical notch to 2 mm deep; claws 1.5–2.5 mm long. Filaments white; lateral filaments slender, unappendaged, 1.8–2.2 mm long; median filaments 1.9–2.5 mm long, basal half strongly inflated to form an oblong appendage 1.1–1.3 mm long; anthers green. Nectar glands surrounding base of lateral stamens, subtending base of median filaments. Fruiting pedicels slender, straight, divaricate, 5–6 mm long, pilose. Fruit oblong, dehiscent, glabrous; valves thin papery, navicular, 3–4 × 1.5–2 mm, with 3 rows of crests, 1 row on midvein and on either margin; replum slender, not flattened; septum absent; gynophore obsolete to 0.1 mm long; style glabrous, conical, 1–1.5 mm long; stigma entire. Seeds 1 or

Hemilophia sessilifolia Al-Shehbaz, Arai & H. Ohba, sp. nov. TYPE: China. Yunnan: Deq, around Dauxue Shan, 28°34'N, 99°48'E, 4300–4550 m, 28 Aug. 1996, Wu Sugong, Hiroshi Ikeda, Michio Wakabayashi, Futoshi Miyamoto, Yang Yongping & Takao Kikuchi 953 (holotype, TI; isotypes, KUN, MO). Figure 1.

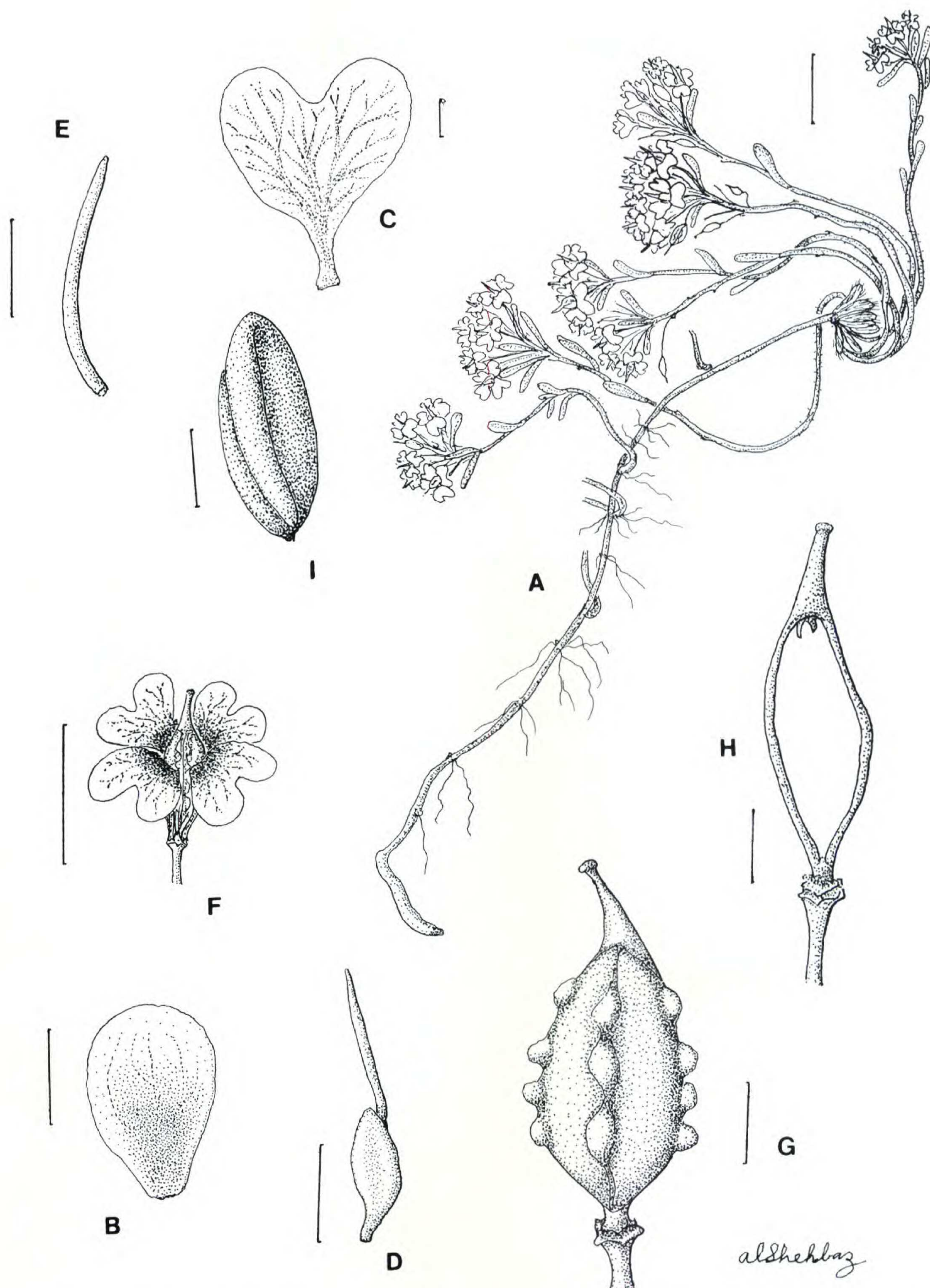


Figure 1. *Hemilophia sessilifolia* Al-Shehbaz, Arai & H. Ohba. —A. Plant. —B. Sepal. —C. Petal. —D. Median filament. —E. Lateral filament. —F. Fruit and persistent petals. —G. Fruit, dorsal view. —H. Fruit after removal of valves and seeds. —I. Seed. Scale bars: A = 1 cm; B–E, G–I = 1 mm; F = 5 mm. Drawn from the isotype at MO.

2 per fruit, oblong, $2.5\text{--}3 \times 1.1\text{--}1.3$ mm, smooth; cotyledons obliquely accumbent.

Hemilophia sessilifolia is readily distinguished from the two other species of the genus, *H. pulchella* and *H. rockii*, by the sessile cauline leaves, membranous, readily caducous entire sepals, persistent petals, glabrous conical style, and exclusively simple trichomes. Both *H. pulchella* and *H. rockii* have petiolate cauline leaves, green sepals

that remain until fruit develops, caducous petals, a minutely papillose cylindric style, and 2-forked trichomes on the stem. *Hemilophia pulchella* is separated from *H. rockii* by having purplish petals 3–4 mm long instead of white petals 5–7 mm long, stem trichomes with long and straight instead of short and crisped rays, and an entire instead of ciliate sepal margin.

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